In the Claims

1. (Currently Amended) A prosthesis, ~~in particular a stent or a shunt, arranged to be implanted~~ implantable at least partially in a blood vessel in contact with a wall of the blood vessel and comprising at least one releasable therapeutic agent, ~~characterised in that said~~ wherein the releasable therapeutic agent comprises melatonin (N-acetyl-5-methoxytryptamine) and/or a drug derived from melatonin and having analogous effects on the healing response of the vessel wall, the therapeutic agent being present in an amount effective to modify the healing response of the vessel wall after tissue injury caused by the implantation of the prosthesis by inhibiting inflammation, cell proliferation and cell ingrowth into the prosthesis.

2. (Currently Amended) ~~A~~ The prosthesis according to claim 1, ~~characterised in that~~ wherein said therapeutic agent is coated on the prosthesis.

3. (Currently Amended) ~~A~~ The prosthesis according to claim 1, ~~characterised in that~~ wherein said prosthesis is an endovascular stent [[,]] ~~more particularly a coronary stent~~.

4. (Currently Amended) ~~A~~ The prosthesis according to claim 3, wherein ~~characterised in that~~ the stent is made of a wire, ~~optionally~~ or a hollow wire filled with said therapeutic agent or with a product containing said therapeutic agent.

5. (Currently Amended) ~~A~~ The prosthesis according to claim 3, ~~characterised in that~~ wherein the stent comprises a generally thin walled cylinder, said cylinder containing a plurality of struts, said struts expandable depending on the amount of force applied to said strut, and said struts having a generally uniform thickness.

6. (Currently Amended) ~~A~~ The prosthesis according to claim 3, ~~characterised in that~~ wherein the stent comprises a generally thin walled structure containing a plurality of struts, the struts expandable to assume the shape of a lumen into which the stent is to be placed, said struts

having a thickness and are provided with one or more recesses formed in at least one of said struts, said recesses having a closed perimeter on all sides and an open top and eventually an open bottom, the recesses containing said therapeutic agent or a product containing said therapeutic agent.

7. (Currently Amended) ~~A~~ The prosthesis according to claim 3, ~~characterised in that~~ wherein said melatonin, and/or said drug derived from melatonin, is coated either as such on the stent surface or is embedded in a biocompatible oil or fat or in a biocompatible polymer coated on the stent, or is conjugated to any substance coated on the stent.

8. (Currently Amended) ~~A~~ The prosthesis according to claim 1, ~~characterised in that~~ wherein the prosthesis has a total load of said melatonin and/or of said melatonin derived drug of at least 0.001 $\mu g/mm^2$, ~~preferably of at least 0.1 $\mu g/mm^2$, more preferably of at least 0.5 $\mu g/mm^2$ and most preferably of at least 2 $\mu g/mm^2$ stent area~~, the total load of said melatonin and/or of said melatonin derived drug being ~~preferably~~ lower than 50 $\mu g/mm^2$~~, more preferably lower than 10 $\mu g/mm^2$, and most preferably lower than 6 $\mu g/mm^2$ stent area~~.

9. (Currently Amended) ~~A~~ The prosthesis according to claim 1, wherein ~~characterised in that~~ the prosthesis is arranged to release said therapeutic agent over a period of at least 6 hours~~, preferably over a period of at least one week,~~ after implantation in the blood vessel.

10-13. (Cancelled)

14. (New) The prosthesis according to claim 1, wherein said prosthesis is a shunt.

15. (New) The prosthesis according to claim 3, wherein said stent is a coronary stent.